

- D) $T=110-115^{\circ}\text{C}$, $P_2O_5=39-45\%$;
- E) $T=100-125^{\circ}\text{C}$, $P_2O_5=55-58\%$.

29. The hemihydrate method for the production of extraction phosphoric acid corresponds to the following process conditions:

- A) $T = 85-100^{\circ}\text{C}$, $P_2O_5 = 30-48\%$;
- B) $T = 65-85^{\circ}\text{C}$, $P_2O_5 = 28-32\%$;
- C) $T = 95-110^{\circ}\text{C}$, $P_2O_5 = 48-50\%$;
- D) $T = 110-115^{\circ}\text{C}$, $P_2O_5 = 49-55\%$;
- E) $T = 115-135^{\circ}\text{C}$, $P_2O_5 = 55-58\%$.

30. The technological mode of the anhydrite method for the production of extraction phosphoric acid is as follows:

- A) $T = 95-110^{\circ}\text{C}$, $P_2O_5 = 48-50\%$;
- B) $T = 85-100^{\circ}\text{C}$, $P_2O_5 = 30-48\%$;
- C) $T = 65-85^{\circ}\text{C}$, $P_2O_5 = 28-32\%$;
- D) $T = 110-115^{\circ}\text{C}$, $P_2O_5 = 49-55\%$;
- E) $T = 115-135^{\circ}\text{C}$, $P_2O_5 = 55-58\%$.

31. The disadvantages of the anhydrite method for producing extraction phosphoric acid are:

- A) the formation of large crystals of anhydrite;
- B) the possibility of corrosion;
- C) fewer washes of the precipitate;
- D) low content of P_2O_5 in the product;
- E) low temperature neutralization process.

32. Waste dihydrate method for the production of extraction phosphoric acid:

- A) ferrophosphorus;
- B) phosphohemihydrate;
- C) phosphogypsum;
- D) phosphoanhydrite;
- E) phospholeum.

33. Waste hemihydrate method for the production of extraction phosphoric acid:

- A) phosphohemihydrate;
- B) phosphogypsum;
- C) phosphoanhydrite;
- D) ferrophosphorus;
- E) phospholeum.

34. The waste production of wet-process phosphoric acid – phosphogypsum is used with the aim:

- A) production of Portland cement, construction gypsum, sulfuric acid, ammonium sulfate;
- B) production of sodium tripolyphosphate and sulfuric acid;
- C) production of sulphides and sulphites;
- D) sulphate and sulphuric acid production;
- E) production of mineral fertilizers, herbicides, insecticides.

35. The process of utilization of phosphogypsum proceeds by reaction:

- A) $\text{CaS} + 3\text{CaSO}_4 = 4\text{CaO} + 4\text{SO}_2$;
- B) $\text{CaSO}_4 + \text{C} = \text{CaS} + 2\text{CO}_2$;